



2001 Drinking Water Quality Report

RRA - BOX COMMUNITY WATER SYSTEM

Red River Authority of Texas

900 8th Street, Suite 520
Wichita Falls, Texas 76301
(940) 723-8697

OUR DRINKING WATER IS REGULATED

by the Texas Natural Resource Conservation Commission (TNRCC) and they have determined that certain water quality issues exist which prevent our water from meeting all of the requirements as stated in the Federal Drinking Water Standards. Each issue is listed in this report as a violation and we are working closely with the TNRCC to achieve solutions.

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline

En Espanol

Este reporte incluye informacion importante sobre el agua para tomar. Para obtener una copia de esta informacion traducir al Espanol, favor de llamar al telefono (940) 723-8697.

Where do we get our drinking water?

The **RRA-Box Water System** utilizes ground water from the alluvium formation purchased from the City of Vernon. The Texas Natural Conservation Commission (TNRCC) will be reviewing all of Texas' drinking water sources. The source water assessment process will be completed within three years. It is important to protect your drinking water by protecting your water source.

Organics - NOT TESTED FOR OR NOT DETECTED

Disinfection By-Products - NOT TESTED FOR OR NOT DETECTED

ALL DRINKING WATER MAY CONTAIN CONTAMINANTS

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

PUBLIC PARTICIPATION OPPORTUNITIES

The Authority's Board of Directors regularly meets on the third Wednesday of January, April, July, and September of each year. Specific times and locations of these and/or any special meetings can be obtained by contacting the Authority at (940) 723-8697.

For more information about the water quality of your water system, public participation programs, water conservation programs, and/or general operations policies, call (940) 723-8697 or e-mail the Authority at: info@rra.dst.tx.us. For service requests or reporting leaks after normal business hours, contact your District Manager, Mr. Thomas Colston at (940) 553-3704 or Mr. Mike Carlson at (940) 474-3263.

SYSTEM INFORMATION

The Red River Authority of Texas owns and operates 29 registered public water supply systems through its Utility Division. The Utility Division maintains over 2,150 miles of transmission lines, two surface water treatment plants, 65 pumping facilities and serves approximately 10,000 customers residing in a 15 county area of the Red River Basin. The Utility Division is subdivided into geographical districts for proper management, maintenance, and financial accounting of individual systems.

The **RRA-Box Water System** is one of the water systems operated by the Utility Division's District 13. In 2001, the system served 54 active connections with an average water use of 661 gallons per day per connection. The primary use of the water was rural domestic. No major capital improvement items were scheduled for 2001.

DEFINITIONS:

Maximum Contaminant Level (MCL) –

The highest level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) –

The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Treatment Technique (TT) –

A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL) –

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

NTU – Nephelometric Turbidity Units

MFL – million fibers per liter

pCi/l – picocuries per liter (a measure of radioactivity)

ppm – parts per million, or milligrams per liter (mg/l)

ppb – parts per billion, or micrograms per liter (ug/l)

ppt – parts per trillion, or nanograms per liter

ppq – parts per quadrillion, or picograms per liter

SECONDARY CONSTITUENTS

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

COLIFORMS

What are coliforms?

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often associated with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Fecal coliform bacteria and, in particular, *E. coli*, are members of the coliform bacteria group originating in the intestinal tract of warm-blooded animals and are passed into the environment through feces. The presence of fecal coliform bacteria (*E. Coli*) in drinking water may indicate recent contamination of the drinking water with fecal matter. The following table indicates whether total coliform or fecal coliform bacteria were found in the monthly drinking water samples submitted for testing by your water supplier last year.

ABOUT THE FOLLOWING TABLES

U.S. EPA requires water systems to test up to 97 constituents. The attached table contains all of the federally regulated or monitored constituents which have been found in your drinking water.

Inorganics

Year	Constituent	Highest Level at any Sampling Point	Range of Detected Levels	MCL	MCLG	Unit of Measure	Source of Constituent
1999	Barium	0.27	0.2700-0.2700	2	2	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
1999	Fluoride	0.4	0.4000-0.4000	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2001	Nitrate	15.06	15.6900-15.6900	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
1999	Selenium	2.1	2.1000-2.1000	50	50	ppb	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
1999	Sodium	36	33.0000-36.0000	NA	NA	ppm	Erosion of natural deposits; By-products of oil field activity.

NA = MCL not applicable - not regulate d. Special Monitoring Requirement.

Unregulated Contaminants

Year	Constituent	Average of All Sampling Points	Range of Detected Levels	Reason for Monitoring
2001-2001	Bromoform	1.55	1.5500-1.5500 ppb	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.
2001-2001	Chlorodibromomethane	0.6	0.6000-0.6000 ppb	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Lead and Copper

Year	Constituent	The 90 th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Constituent
2000	Lead	3.1000	0	15	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.
2000	Copper	0.1540	0	1.3	ppm	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

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Total Coliform

Year	Constituent	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Source of Constituent
2001	Total Coliform Bacteria	1	*	Presence	Naturally present in the environment
* Two or more coliform found samples in any single month.					

Fecal Coliform - NOT DETECTED

Violation Table

Violation	Explanation	Health Effects	Length	Steps to Correct
MCL-NITRATE	Nitrate levels were recorded at 15.06 ppm exceeding the MCL.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill, and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.	1/1/2001 to Present 4/1/2001 to Present 7/1/2001 to Present 10/1/2001 to Present	A nitrate removal treatment system is currently under study by the City of Vernon. Bottled water is provided to qualified persons.

Nitrate

(Above 5 mg/l, but below the MCL)

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. If you are caring for an infant you should seek advice from your health care provider.